

Date:
User:Tuesday, 10/3/2006 3:48:06 PM
Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: TOW RING
Job Number	: 28865	Part Number	: D2968043
Estimate Number	: 10400	Drawing Number	: D2968
P.O. Number	: N/A	Project Number	: N/A
This Issue	: 10/3/2006	S.O. No.	: N/A
Prsht Rev.	: NC	Drawing Revision	: B1
First Issue	: N/A	Material	: N/A
Previous Run	: 28268	Due Date	: 10/30/2006
Written By	: KJ 06 10 03		
Checked & Approved By			
Comment	: Est:C 03.06.11 Reformat; Incorporated D2968-1/5 KJ/RF		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	28865A	STEM
		Comment: Sub-Component STEM D2968-3 B <u>28865A</u> 06.11.10 22
2.0	28865B	RING
		Comment: Sub-Component RING D2968-5 B <u>28865B</u> 06.11.10 22
3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
		Comment: LARGE FABRICATION RESOURCE 1 Weld D2968-3 & D2968-5 as per Dwg D2968 & QSI 004 using 4130 welding rod Identify as D2968-043 Batch: <u>M15L84</u> 06.11.10 22
4.0	QC5/9	WELD INSPECTION
		Comment: WELD INSPECTION 06.11.13 22
5.0	PG	PURCHASING
		Comment: PURCHASING Issue P/O: <u>2473</u> 06.11.13 22 Description: D2968-043 to heat treat to ultimate tensile strength 125ksi as per Dwg D2968 Conformity sheet required Issue P/O: <u>2474</u> 06.11.13 22 Cad Plate per QQ-P-416F Class I Type II

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA:  Date: 04/12/08
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 3:48:07 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TOW RING

Job Number: 28865

Part Number: D2968043

Job Number:



Seq. #:	Machine Or Operation:	Description :
	Conformity sheet required	
6.0	PACKAGING 1	PACKAGING RESOURCE #1
		<i>Oct 12/07</i>
	Comment: PACKAGING RESOURCE #1 Receive & Inspect For Transit Damage Ensure certificate of conformity is attached	
7.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
		<i>Oct 12/07 (u)</i>
	Comment: INSPECT CAD PLATE	
8.0	POWDER COATING	POWDER COATING
	Comment: POWDER COATING Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3 ***DO NOT POWDER COAT THREADS***	<i>A.M / M.B</i>
9.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT	<i>FC 06 12 08</i>
10.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Identify and Stock Location: ST113	<i>ST113 Oct 12/08</i>
11.0	QC21	FINAL INSPECTION/W/O RELEASE
	Comment: FINAL INSPECTION/W/O RELEASE	<i>Oct 12/08</i>

Job Completion



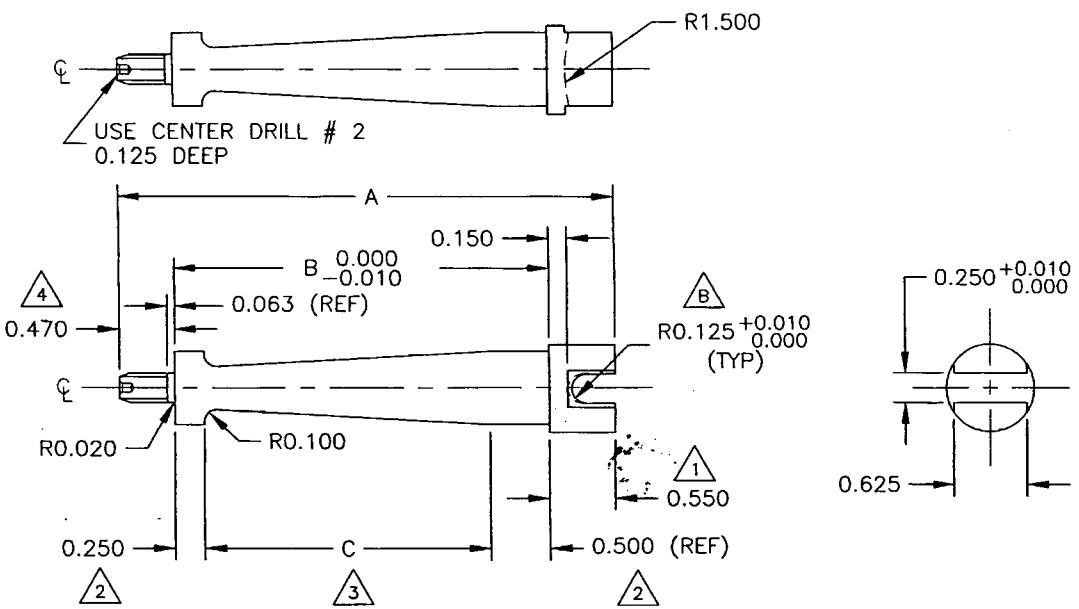
1..06.12.08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



PART NUMBER	A	B	C
D2968-1	5.040	4.020	3.270
D2968-3	4.200	3.180	2.430

D2968-1/-3 STEM

D2968-1 AND D2968-3 STEM:

MATERIAL: AISI 4130

△ Ø0.750 O.D.

△ Ø0.625 O.D.

△ MACHINE UNIFORM TAPER FROM Ø0.363 O.D.
TO Ø0.625 O.D.

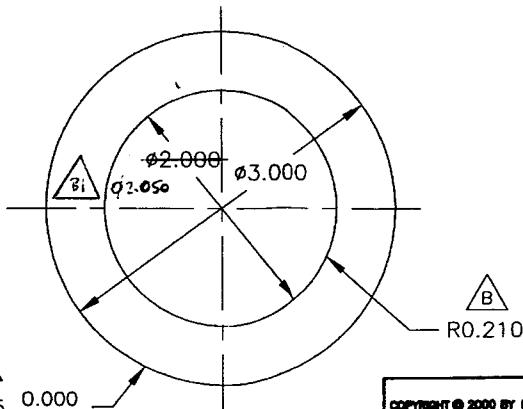
△ 1/4-28 UNF THREAD WITH 0.063 GRIP
MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
UNLESS OTHERWISE INDICATED

TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED

D2968-5 RING:

MATERIAL AISI 4130

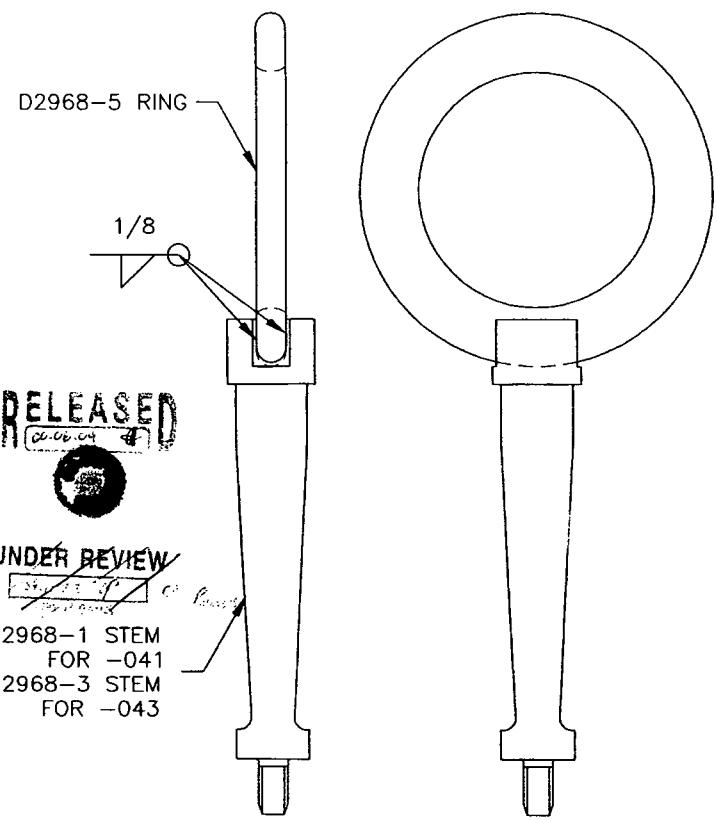
TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED



D2968-5 RING

R0.125 ^{0.000}_{-0.010}

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
WITHOUT NOTICE
WORK ORDER
NO. *2865*
SUBJECT TO AMENDMENT



D2968-041 AND D2968-043 TOW RING:
WELD PER QSI 004 ON ALL EDGES BETWEEN STEM AND RING
HEAT TREAT TO MIN ULTIMATE TENSILE STRENGTH OF 125 KSI
FINISH: CAD PLATE ENTIRE ASSEMBLY PER
QQ-P-416F CLASS I TYPE II
POWDER COAT WHITE (REF 4.3.5.2) PER DART
QSI 005 4.3 (EXCEPT THREADS)
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

B	00.05.31	R0.125 AND R0.210 WERE 0.060 x 45°
A	00.03.07	NEW ISSUE
DESIGN	DRAWN BY	DART
<i>[Signature]</i>	<i>[Signature]</i>	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2968
<i>[Signature]</i>	<i>[Signature]</i>	REV. B SHEET 1 OF 1
DATE	TITLE	SCALE 1:1
00.05.31	TOW RING	

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AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

MANCO
DOMPLEX

8895 Crescent 3
Anjou (Québec) H1J 1B6
Tél.: 514-355-7867
Fax: 514-355-8750

CERTIFICAT DE CONFORMITÉ
CERTIFICATE OF COMPLIANCE# *B301*Dart Aerospace Inc

Client / Customer

Po2474 ✓

Votre # de commande / Your purchase order #

ID2968043 B28865

de la pièce / part

102379

Notre # de bon de livraison / Our packing slip #

Inspecteur / Inspector	<i>Renault</i>		
Placage / Plating	<i>QQA 416 P ✓ CLASS 1 Type II</i>		
Quantité totale / Total quantity	22	Quantité inspectée / Inspected quantity	22
Adhésion / Adhesion	<i>good</i>		
Épaisseur / Thickness	L.C.D.	H.C.D.	Moy. / aver. <i>0.0005</i>
Coulisses, taches / Leach, spots	<i>non</i>	Rugosité / Roughness	<i>non</i>
Quantité approuvée / Approved quantity	22	Quantité rejetée / Rejected quantity	—

Commentaires / Comments

Nous certifions que les pièces énumérées ci-dessus ont été faites en conformité avec vos dessins et spécifications et rencontrent les exigences contenues dans ces dessins et/ou spécifications.

We hereby certify that the parts listed above have been made in accordance with your drawings and specifications and are correct to the requirements contained in those drawings and/or specifications.

Signé au nom de
Signed on behalf of**MANCO**
DOMPLEX



VAC AERO
INTERNATIONAL INC.

RELEASE NOTE

GST No.: R105468102

OAK 81501-1

HEAD OFFICE
1371 SPURS ROAD, OAKVILLE, ONTARIO
CANADA L6L 2X5
TEL: (905) 827-4171 FAX: (905) 827-7489

2009 WYECROFT ROAD, UNIT B
OAKVILLE, ONTARIO
CANADA L6J 6J4
TEL: (905) 827-7377 FAX: (905) 827-1380

QUEBEC DIVISION
7450 RUE VÉRITÉ STREET, ST. LAURENT, QUÉBEC
CANADA H4S 1C5
TEL: (514) 334-4240 FAX: (514) 334-6269

11/29/2006
MM / DD / YYYY

PAGE : 1

BILL TO: 1DAR01
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

K6A 1K7

SHIP TO: MANCO DOMPLEX
4660 HICKMORE
ST. LAURENT, QC

H4T 1K2

DATE SHIPPED	SHIP VIA	F.O.B.
11/29/2006	PUROLATOR # 7684382	ORIGIN
CUSTOMER P/O No.	JOB No.	TERMS
P000002473		COD

PART No.	DESCRIPTION	UOM	QTY ORD	QTY SHPD	TEST RESULTS
D2968-043		EA	22	22	
	Process Specifications: HEAT TREATED TO 125 KSI MIN. 100 % HARDNESS TESTED PER ASTME-18 MATERIAL: 4130		Procedure: 4047		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 100% HARDNESS TESTED 29/30 HRC </div>
B28865					<div style="text-align: right; margin-right: 10px;"> <i>29/30 HRC</i> </div> <div style="text-align: right; border: 1px solid black; border-radius: 50%; padding: 2px;"> <i>VAL.O.</i> <i>TH.</i> <i>29</i> <i>QC</i> </div> <div style="text-align: center; margin-top: 10px;"> </div>

I hereby certify that the material covered by this release note has been inspected and tested and conforms to all specifications relevant thereto in accordance with the conditions of the contract / or purchase order.

ON BEHALF OF VAC AERO INTERNATIONAL INC.

Dawn Greenway
Authorized Q.C. Inspector



VACUUM BRAZING · HEAT TREATING · SPECIAL PROCESSING · FURNACE EQUIPMENT
TURBINE COMPONENT OVERHAUL · PLASMA AND OTHER COATINGS